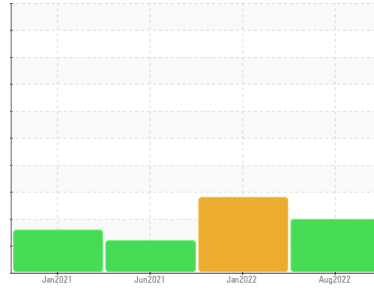


PROBLEM SUMMARY

Sample Rating Trend



ISO



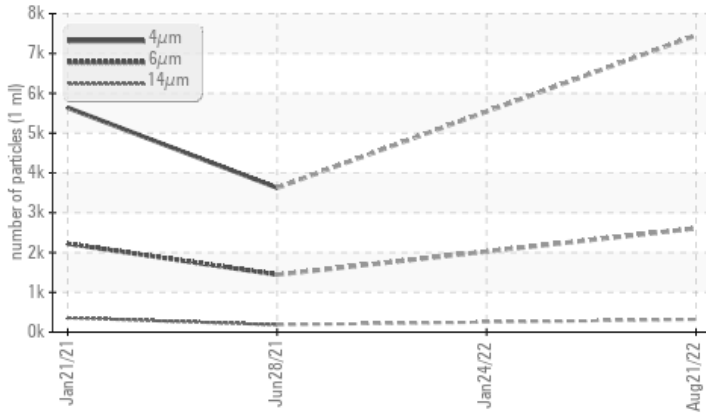
Machine Id
4942056 (S/N 1045)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | ASTM D7647 | Limit | ABNORMAL | ABNORMAL | ABNORMAL |
|-----------------|--------------|-----------|------------|----------|----------|
| Particles >6µm | ASTM D7647 | >1300 | ▲ 2608 | --- | ▲ 1443 |
| Particles >14µm | ASTM D7647 | >80 | ▲ 318 | --- | ▲ 184 |
| Particles >21µm | ASTM D7647 | >20 | ▲ 74 | --- | ▲ 31 |
| Particles >38µm | ASTM D7647 | >4 | ▲ 7 | --- | 1 |
| Oil Cleanliness | ISO 4406 (c) | >--/17/13 | ▲ 20/19/15 | --- | ▲ 18/15 |

Customer Id: FPECIR
Sample No.: KCP49702
Lab Number: 05623890
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

24 Jan 2022 Diag: Angela Borella

WATER



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



28 Jun 2021 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



21 Jan 2021 Diag: Jonathan Hester

ISO

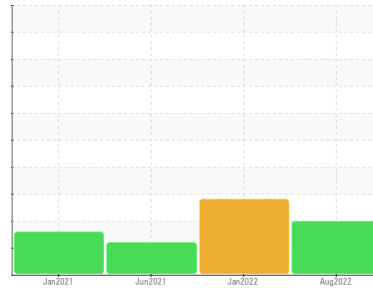


Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Machine Id
4942056 (S/N 1045)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|--------------------|-------------|-------------|
| Sample Number | | | KCP49702 | KCP35137 | KCP32472 |
| Sample Date | | | 21 Aug 2022 | 24 Jan 2022 | 28 Jun 2021 |
| Machine Age | hrs | | 55617 | 53552 | 50058 |
| Oil Age | hrs | | 2065 | 3494 | 2559 |
| Oil Changed | | | Not Changed | Changed | Not Changed |
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history 1 | history 2 |
|----------|--------|-----------------|--------------|-----------|-----------|
| Iron | ppm | ASTM D5185m >50 | 0 | 0 | <1 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m >3 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 8 | 8 | 5 |
| Tin | ppm | ASTM D5185m >10 | 0 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | --- | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history 1 | history 2 |
|------------|--------|----------------|--------------|-----------|-----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 17 |
| Barium | ppm | ASTM D5185m 90 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m 90 | 19 | 0 | 14 |
| Calcium | ppm | ASTM D5185m 2 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 4 | 3 | 2 |
| Zinc | ppm | ASTM D5185m | 3 | 0 | 5 |
| Sulfur | ppm | ASTM D5185m | 17006 | 15496 | 15406 |

CONTAMINANTS

| | method | limit/base | current | history 1 | history 2 |
|-----------|--------|------------------|--------------|-----------|-----------|
| Silicon | ppm | ASTM D5185m >25 | 0 | <1 | 0 |
| Sodium | ppm | ASTM D5185m | 6 | <1 | 6 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 0 | <1 |
| Water | % | ASTM D6304 >0.05 | 0.013 | ▲ 0.275 | 0.013 |
| ppm Water | ppm | ASTM D6304 >500 | 137.8 | ▲ 2750 | 135.5 |

FLUID CLEANLINESS

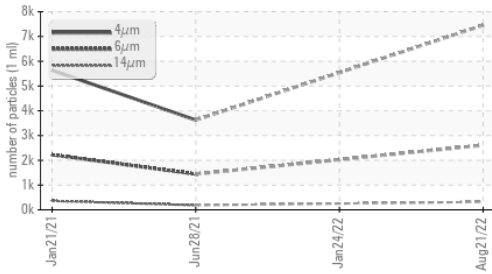
| | method | limit/base | current | history 1 | history 2 |
|-----------------|------------------------|------------|-------------------|-----------|-----------|
| Particles >4µm | ASTM D7647 | | 7455 | --- | 3626 |
| Particles >6µm | ASTM D7647 >1300 | | ▲ 2608 | --- | ▲ 1443 |
| Particles >14µm | ASTM D7647 >80 | | ▲ 318 | --- | ▲ 184 |
| Particles >21µm | ASTM D7647 >20 | | ▲ 74 | --- | ▲ 31 |
| Particles >38µm | ASTM D7647 >4 | | ▲ 7 | --- | 1 |
| Particles >71µm | ASTM D7647 >3 | | 1 | --- | 0 |
| Oil Cleanliness | ISO 4406 (c) >--/17/13 | | ▲ 20/19/15 | --- | ▲ 18/15 |

FLUID DEGRADATION

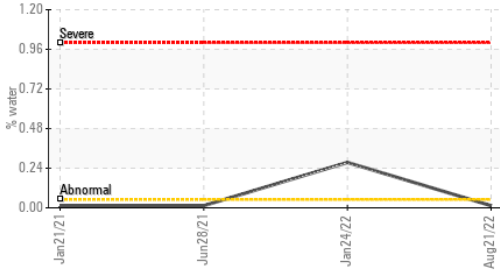
| | method | limit/base | current | history 1 | history 2 |
|------------------|----------|----------------|-------------|-----------|-----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | 0.35 | 0.37 | 0.373 |

OIL ANALYSIS REPORT

▲ Particle Trend



Water

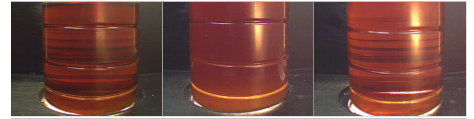


| VISUAL | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | ▲ MODER |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | ▲ HAZY |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | 0.2% |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|-----------|-----------|
| Visc @ 40°C | cSt | ASTM D445 | 46 | 44.3 | 45.1 |

| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|---------|-----------|-----------|
|---------------|--------|------------|---------|-----------|-----------|

Color

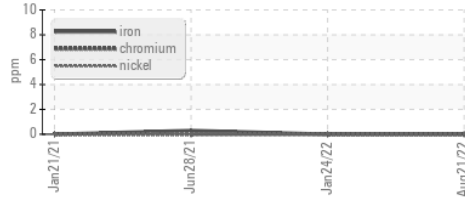


Bottom

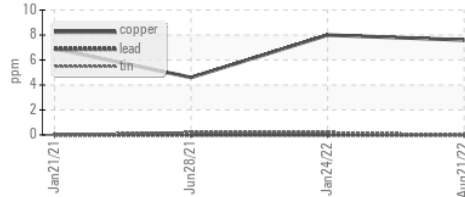


GRAPHS

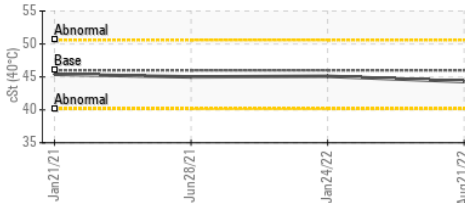
Ferrous Alloys



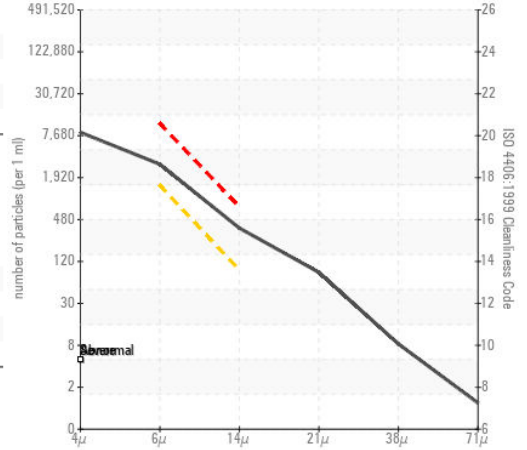
Non-ferrous Metals



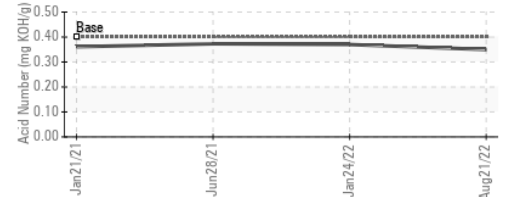
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KCP49702 Received : 22 Aug 2022
 Lab Number : 05623890 Diagnosed : 24 Aug 2022
 Unique Number : 10103397 Diagnostician : Don Baldrige
 Test Package : IND 2 (Additional Tests: KF, PrtCount)

FPE/GE INDUSTRIES
 30672 ORR RD
 CIRCLEVILLE, OH
 USA 43113
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: